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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/698,394

11/03/2003

Tessei Shimizu

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07/28/2005

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EXAMINER

NGUYEN, THU V

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,394

Applicant(s)

SHIMIZU, TESSEI

Examiner

Thu Nguyen

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 5-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/6/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed on May 6, 2005 has been entered. By this amendment, all claims 1-10 are now pending in the application. Among the pending claims, non-elected claims 5-10 have been withdrawn from consideration.

Claim Objections

1. Claim 6 is objected to because of the following informalities:

In claim 6, line 5, the claimed "the vehicle a vehicle of the company" should be corrected to "the vehicle is a vehicle of the company".

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-2, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kapolka et al (US 6,714,857) in view of Riu et al (JP 2002-197155) (enclosed IDS) and Lightner et al (US 6,636,790).

As per claim 1, Kapolka teaches a driving diagnostic system comprising: a vehicle 105 (fig.1), a center 120 (fig.1), a user terminal 125 (fig.1), a network 125 (fig.1) and a radio communication network 115 (fig.1). The vehicle includes a sensor (a compass) (col.9, lines 43-

47), and an in-vehicle device 218 (fig.2) in which the in-vehicle device acquires information about the fuel consumption, speed, vehicle position and time (col.4, lines 59-67) and temporarily processes the acquired data for subsequent use (col.6, lines 39-46); the radio communication terminal transmits the information to the center via radio communication network and receives information from the center (col.5, lines 40-43); the center includes a communication control device for transmitting and receiving the information to and from the radio communication terminal in the vehicle (col.6, lines 47-49; col.4, lines 38-40), a management server for managing the information transmitted from the vehicle, calculating fuel consumption with respect to each event (idling, etc) (col.6, lines 49-63; col.7, lines 34-58) for a total driving time, storing the calculated information (col.7, line 55); providing the content for advices to the user's terminal via a web server (col.7, lines 55-58; col.4, lines 45-50); the user's terminal is a personal computer 125 (fig.1) for displaying the contents information (col.4, lines 52-58). Kapolka does not explicitly disclose that the in-vehicle device provides data concerning engine revolutions, vehicle speeds; the management server provides environment-load emissions, stores the calculated information in the database with user information, retrieves and process the information for diagnosis by combining and comparing the information, provides the contents from the mail server to the user terminal; and the user's terminal sets up timing of providing the contents and detail of the contents and informs with sound. However, Riu teaches using engine speed which is well known to be derived from the engine revolutions, vehicle speeds for determining environment-load emission (abstract; para 0027, 0029), storing calculated information with user information in a database (para 0020; 0036), retrieving and processing the

information and provides the content of the information via email server (para 0044), and Lightner suggests using gathered data from the vehicle for diagnosis by combining and comparing the data (col.3, lines 6-22, lines 34-50; col.4, lines 52-59; col.8, lines 56-67). Further, setting up personal information, timing of providing the contents, and utilizing sound for alerting the user would have been well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the method for determining environment-load emission of Liu and the method for performing vehicle diagnosis of Lightner to system of Kapolka in order to allow the user to track working condition of a specific vehicle and to monitor the amount emission to facilitate limiting pollution to the environment.

As per claim 2, providing a display at the server center so that the operator at the server can monitor general vehicle diagnosis condition would have well know.

As per claim 4, Riu teaches in fig.3 a terminal of a company which is required to reduce fuel consumption (para 0042, 0050) and a center of a traffic 3 (fig.3). Further, Riu the capability of providing suitable action based on the environment load emission (which is well known to correspond to the amount of fuel consumption) (para 0045) and allowing the company to sell surplus right of pollution (para 0051), moreover, reducing the fuel cost by reducing taxes, or by the reimbursement of the selling of the surplus right of pollution would have been both known and obvious design choice.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kapolka et al (US 6,714,857) in view of Riu et al (JP 2002-197155) (enclosed IDS) and Lightner et al (US 6,636,790) and Satoshi et al (US 2002-089349) (enclosed IDS).

As per claim 3, refer to claim 1 above. Further, turning power source when a vehicle start up, using wire line or short range wireless communication system such as Bluetooth technology between the sensors and the in-vehicle device would have been well known vehicle operation. Moreover, Satoshi teaches breaking down of fuel consumption with respect to each event (stop event, sudden braking, sudden accelerating, etc), finding out an event causing increases of fuel consumption, and advising a user to drive in a way to reduce fuel consumption (para 0026-0027, 0094, 0096-0097, 0101-0102; 0023). Moreover, determining environment load emissions from the amount of fuel consumption would have been both well known and obvious. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to break down the fuel consumption (and hence break down environment load emissions) of Kapolka in view of Riu and Lightner with respect to vehicle operation events as taught by Satoshi in order to help the driver to improve driving operation to save fuel as motivated by Satoshi in para 0023 and therefore to minimize pollution to the environment.

Response to Arguments

5. the claim objection to the withdrawn claim 6 is maintained to remind the applicant to correct the informality should claim 1 to which claim 6 depends on is allowed.

6. Applicant's arguments filed May 6, 2005 have been fully considered but they are not persuasive.

7. In response to applicant's argument on pages 12-14, that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation for combining references is found in the knowledge generally available to one of ordinary skill in the art. Kapolla teaches using vehicle speed in determining driving diagnostic system, Riu teaches using engine speed in determining the environmental load (para 0027, 0029), the engine speed is well known to be derived from the engine revolutions, therefor using engine revolutions in the Kapolla would have been obvious in view of Riu's teaching, moreover, storing user's information and providing information via mail server would have been obvious matter of selecting a communicating method for communicating from a remote location to a local device when such the communication is needed. In view of Lightner's teaching, diagnosing vehicle condition including gathering data and comparing data would have been obvious in determining certain vehicle condition by comparing data measured with the thresholds that indicates normal or abnormal condition of the vehicle. Furthermore, with respect to claim 3, in view of Satoshi's teaching, determining fuel consumption corresponding to each operation event such as stop

event, sudden braking, etc. would have been available as prior arts, when it is desired to suggest the driver to avoid certain operation to save the fuel in the system or Kapolka, an ordinary person skilled in the arts would be motivated to resort to Satoshi's teaching to determine fuel consumption for each operation, and to provide advisory to the driver accordingly.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

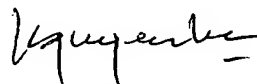
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (571) 272-6967. The examiner can normally be reached on T-F (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 22, 2005



THUY V. NGUYEN
PRIMARY EXAMINER